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THE GENESEE FARMER.

SATURDAY, MARCH 12, 1836.

To Correspondents.

We have a number of valuable communications on hand, which shall have a place in their turn.

☞ The drawing of Mr. Geddes' Harrow is in the hands of the engraver.

☞ The package from S. GRIGGS, Esq. was received last week.

☞ We shall be glad to receive the statement promised by our correspondent *Niagara.*

EXTRACTS FROM LETTERS.

Remedy for the Bloody Murrain.

From a subscriber in Orleans county:—"In answer to an inquiry in the Farmer a few weeks since, I would state that I had an ox attacked with the Bloody Murrain this winter so violently that in two or three hours he had discharged between three and four gallons of blood. I remembered to have heard it said years ago that the green leaves of the Mullein, steeped in milk, was a certain remedy. I lost no time until I found some of the leaves, having to dig under the snow for them. They were steeped in new milk, and about three quarts of the tea, poured off *without straining*, given to the ox, which produced an immediate cure. I have since known a cow cured in the same way."

Silk Culture in Ohio.

From a correspondent at Flushing, Belmont county:

"The culture of silk is beginning to claim some attention in this section of country, and promises to be of considerable importance. The climate is congenial to the growth of the Mulberry, as indicated by the growth in our forests of many indigenous trees; those which have been preserved in fields and meadows for shade, fruit, &c., having attained a size I should think of more than twelve inches, with large spreading tops, and leaves much larger than the white, and produce a large black berry. Those in timber lands are not generally so large, as they have been kept down by the shade of trees of superior growth. If, as I am inclined to believe, those leaves will furnish a material or basis for silk, equal in quality to that produced from the White Italian, they will certainly be of infinite importance in the production of that article in the western country. Some experiments were made last year, and a few cocoons made, but have not, to my knowledge, been submitted to that inspection from which a test of their quality may be deduced. One individual at Mount Pleasant is manufacturing a considerable quantity made the last year—he proposes having it altogether finished under his own instruction.

"I am cultivating a few thousand of the Italian, and endeavoring to procure some of the Multicaulis, in order to propagate from cuttings. I also intend to cultivate from some of our largest leafed native trees."

The Hessian Fly.

Extract of a letter from CHARLES GALE, Esq. of Milton, (Pa.):

"While I am writing to you on business, I may as well communicate my experience, of from 15 to 20 years, respecting the 'Hessian Fly,' which, previous to that period, had frequently proved very destructive to my wheat crop. Close observation showed me that it almost invariably attacked early sown wheat in the latter part of autumn, and after experience also proved, that wheat sown late, was equally liable to destruction by the ravages of that insect, in the following spring. I then adopted a middle course, sowing my wheat, if possible, between the 27th of September and the 8th of October, and have never suffered $10 loss by the Hessian Fly since I adopted that course. I however am convinced that my crop now in the ground is materially injured by the insect, in consequence of the very warm and unseasonable weather that we had last Oct. and part of Nov. This, however, is one of those exceptions that will sometimes occur in general rules, the effects whereof cannot be guarded against."

Sowing Clover Seed among Indian Corn.

Another extract from the same letter:—"It is now more than 20 years since I first thought of sowing clover seed among Indian corn. My first essay was a failure; my second succeeded to admiration, and the seed was covered by the plough. Since that time I cover it with the harrow or the cultivator, and with various success, depending in a great measure on favorable or unfavorable weather during the month of August. If successful it should be strewed with gypsum the next spring, and may be partially pastured in summer. It should be ploughed down before wheat harvest, and will be generally a good manure for a succeeding wheat crop. Plough again after the middle of September, which will prepare the ground in the best possible manner for the reception of the seed."

Book Farming.

From Dutchess county:—"A few days past, two considerable farmers were storm-bound at my house, and the Gen. Farmer was the occasion of one of them saying, (without reading it,) 'if farmers should pay attention to such publications, they would all get into the County Poor-House.' The two farmers were unacquainted with each other's practice in this respect, but both were known to me. The one who made the observatien has an excellent farm of 150 acres in this county, and with moderate exertion and good living, clears perhaps $500 per annum—that is not bad doing; but the other is one attentive to all kinds of experimental and book farming, with land not so favorable for it, who with equal care, and I doubt not with more pleasure, as he makes it a constant school and derives a constant increase of knowledge, more than doubles him at present, beside the prospect of an increased ratio of profits from the full development of his present course of improvement."

A Hint to Silk Culturists.

"Experience has shown that the floss, or tow, should not be boiled previous to carding, as directed by Cobb in his Manual; but carded with cotton cards as it comes from the cocoons, and made into round rolls and spun like wool. The floss should not be cut as directed by some."

Dutton Corn.

Our friend, Dr. C. S. BUTTON, of Newark, Wayne county, has promised us an account of a very fine crop of corn which he raised last season. In a recent note he informs us that the variety cultivated was the Dutton or Buel twelve-rowed, which is about twelve days earlier than the common eight rowed, and of which he will be able to supply such as may wish to procure this kind for seed the present spring.

Southern Early Clover.

Dr. B. further says:—"I have also for sale some fifteen bushels of the Southern Early Clover Seed. Its stalks are not hollow, but filled like the corn-stalk—its blows are larger and set along the lateral branches as low as the clover is cut. I think it quite preferable to the small clover, and it is as early."

Value of the Genesee Farmer.

Testimonies like the following from an English gentleman, who has read the Farmer from its commencement, are of frequent occurrence in the letters of our subscribers:

"I am a very close and attentive reader of the Genesee Farmer, and have profited more than one hundred times its value by its possession."

Raising Calves.

It is a very general practice in many places, to permit calves to run with, or at least to suck the cows during the first season, and a prevalent opinion is that this is the best way of raising them. The former practice,—that of allowing the calf to run constantly with the cow,—is always injurious to a good milker, for unless a cow has the *whole* of her milk regularly drawn from her, which rarely happens where it is left entirely to the will of the calf, unless the udder is completely emptied, the lactic secretions are constantly diminished,—and the cow would consequently become eventually dry. But where the calf is turned to the cow only at stated intervals,—at morning and evening,—and pains are taken that all the milk is withdrawn, although this does not injure the cow, yet it is found to be

a very expensive practice; for a calculation will readily show that the milk of a cow during the season, if appropriated to dairy use, would bring more than the whole value of the calf in autumn. Giving the calf but a part of the milk of the cow, and weaning it early in summer and turning it to pasture, is no improvement; for unless it has a good supply of nutritious food, and unless this is continued through the season, there can be no hope of raising a valuable animal. The frequent raw-boned, stunted, ill-shaped ones, which we see, are a sufficient comment on the truth of this.

Experience has shown, both in England and in this country, that the finest animals may be raised in great numbers, without allowing them to suck the cow after the first three or four days. One of the best practices is the following. The calf is allowed to suck a few days, till it has increased in strength and appetite sufficient to enable it to swallow readily, during which time care should be taken to milk the cow while it is sucking, in order to draw off the whole of the milk; it should then be separated from the cow. Some recommend even to remove it when it is not more than twelve hours old. It may be learned to drink by allowing it to suck the finger placed in the vessel. It should at first be fed entirely on new milk. In two or three days, a very small quantity of water, of the same temperature with the milk, is added, and increased very gradually day after day; at the same time a small quantity of *meal* is to be added with it, and this also is to be gradually increased, and at the same rate, in order to supply the deficiency of nourishment occasioned by the addition of the water. At the same time, skimmed milk may be gradually substituted for new milk. This should at first be boiled, and afterwards cooled to the proper temperature, as otherwise it would be liable to cause purging. The temperature may then be gradually diminished till it is given cold. Thus in a few weeks the calf will have learned gradually, but almost imperceptibly, to subsist entirely on water or old milk mixed with meal. The meal at first should be fine, but coarser may subsequently be substituted; and finally shorts or bran may be given if necessary. By thus *gradually* accomplishing any change, it may be done without the least difficulty, at the same time there will be no danger of injury to the calf, which would be the case if sudden changes were employed. Sudden changes indeed, should never in any case be adopted, for they are always detrimental, and sometimes fatal.

Calves for killing, may be fattened in this way, and with proper attention be in as good condition at an age of five or six weeks, as when fed exclusively on new milk; and it may in many instances be of importance to adopt it for fattening calves, especially during the present season of the year when milk is valuable.

Calves should have at all times plenty of clean litter and a good supply of fresh air. Calves for the butcher sometimes injure themselves by sportiveness; this may be prevented by keeping them nearly in the dark, as they evince less of a playful disposition than when exposed to full light. But they should never on any account be confined by tying, for this does not abate the restlessness of their disposition, and they are constantly spending themselves in exertions to get loose.

It is a very improper but not unfrequent practice to give little attention to calves after the early part of the season, and to suffer them to feed on pasture alone, without any other food. In this way they very commonly become poor, and but little prepared to withstand the coming winter. Their future value greatly depends on their treatment during the first year, consequently they should be kept in good condition throughout the season; and through autumn they should be gradually accustomed to the food on which they are to be wintered.

The Road Laws.

We intend this as a supplement to our former articles on this subject.

Our remarks were made principally in reference to the heavy loam which prevails throughout so large a portion of the western part of this state; and we are aware that there are other tracts to which our observations are less applicable.

We have no estimate of the expense of breaking stone of the requisite degree of fineness for a M'Adamized road. It is doubtful if the broken stone on some of our *great roads* is more of a benefit than a nuisance. We are therefore disposed to adopt the opinion of our correspondent T. C. (page 47) that manual labor is out of the question. We wish our readers to understand distinctly however, the great advantage that would accrue if we could procure broken stone at a moderate expense. We wish them to reflect on the subject, and to keep their minds a little in advance of the actual state of improvement among us; and for this purpose we introduced some staments in our last article, respecting the excellence of M'Adamized roads. With the same view we submit the following details.

The beaten track of some roads in this quarter, traversed by stage coaches carrying the United States mail, is probably not more than six yards in breadth, on an average. Now a cubic yard of broken stone, laid on six inches thick, would make one yard of M'Adamized road; and consequently it would require 1760 cubic yards to make one mile.

It is worse than idle to think of having rail-roads except on some of the principal thoroughfares through the state. They are forbidden by the expense, and by being not adapted to the common wagons and carriages of the country. Further, the whole business done on a rail-road, ought to be managed by one set of agents, otherwise collision and confusion are sure to follow. It ought always to be a MONOPOLY.

On routes of secondary importance therefore, the system of M'ADAM is doubtless the one to be adopted. The simplicity of its structure is a great recommendation; but it is a road that will not bear slighting: It must be constructed faithfully and thoroughly, or it cannot answer the purpose intended.

In some parts of our country, it may be difficult to construct M'Adamized roads on account of the scarcity (and consequent expense) of good stone; and here we particularly allude to those parts in which slate chiefly occurs. Some varieties of slate would make a *good* road, but it would not be *very durable*. The grinding of carriage wheels on stones of moderate hardness, is considerable; and in heavy rains, the disintegrated parts are washed away, so that a road *greatly* traveled, must require *frequent* repairs. On roads of but secondary importance, however, the wearing would be much less. We have observed that on some turnpikes of broken stone, the *hardest* kinds in the neighborhood were selected for the very reason that they wear longer, although we believe they require more labor in breaking.

We have mentioned a machine for breaking stone at Pittsburgh, and saw some years ago, a notice of one near Boston; but we should feel obliged to any correspondent who would give us more explicit information about any such machine. It is said that a stroke comparatively light, is the best for this purpose. When worked on a grate, all the pieces that are sufficiently reduced fall through; and hammers which fall like a tilt or trip hammer, may be easily constructed to be moved by horse power. What we want however, is the result of experience.

In some countries artificial roads are made by excavating the earth, filling in stones, and then on these throwing the fragments of stones, made still finer as they approach the surface, so that the whole deposit sometimes exceeds three or even four feet in thickness. These roads are very expensive. This is not the only objection however: in winter they are liable to be inundated, and then broken up by the frost; and the expense of repairs on some, in one season was greater than the whole cost of constructing a M'Adamized road. The latter is safe from frost and flood.

The Wheat Crop in Danger.

We learn from various sections of the country, and from some of our most intelligent farmers, that much fear is entertained, and we apprehend not altogether without reason, that the wheat is suffering severely in consequence of the dense body of snow with which, in many of our counties, it is covered. Averaging as it did three and a half, or four feet in depth over much of Western New York, the thaw of Feb. 21—24 settled it not so much as half, leaving the ground still covered with a mass which effectually excludes all air from the surface of the earth. So long as the ground remains frozen, so long the plants remain in a state of torpidity, and exclusion from light and air produces no injurious effect; but when by a body of snow, or otherwise, the ground becomes destitute of frost, the wants of plants return, and unless supplied, they must eventually perish. Every farmer is acquainted with the fact, that in ordinary years, when large piles of snow are drifted on wheat fields, and lie until the frosts leave the earth, and vegetation feels the influence of returning heat, the wheat plants in such places are covered with a moldy film, the leaves turn black and die, and frequently cause the death of the entire plant. This takes place oftener when the snow goes off gradually, than when it dissolves by a rain; as in the latter case the wheat plants are almost at once freed from this moldy envelop, and sooner exposed to the reviving effects of light and air. Such is the depth of snow at the present time, that the effect is the same as if drifted, and there

is reason to apprehend the same results will ensue.

For this state of things there can be no remedy, until the snow disappears, when harrowing the grain with a light harrow, as is practiced by some in the case of winter killed grain, has been found of service. We knew a farmer a few years since make an experiment on a wheat field, which in his case succeeded admirably, though it would be difficult to repeat it in snow of the present depth and density. His field was so situated, that the snow upon it lay as it fell, and as late as the last of March, so gradual had been its wasting, it was still a foot in depth. Finding by excavating the snow in different places that his wheat was suffering, he turned his cattle into the field, and when the snow was unfrozen, drove them in different directions repeatedly over it. This process opened a multitude of holes through the snow, by which the air could penetrate and afford a partial circulation—since after the frost is out of the ground, the snow is rarely, if ever, in direct contact with the wheat plants—not pressing, but suffocating them. To this operation he attributed the safety of his wheat, as others who had fields similarly situated, but who neglected such precaution, did not harvest half a crop. *a.*

The Gardener's Magazine.

We continue our extracts from Loudon's "*View of the progress of Gardening and Rural Improvement during the past year.*"

Nurseries of Fruit Trees, &c.

"Various gentlemen in different parts of the country, require their head gardeners to keep a nursery of fruit trees and fruit shrubs to be given away to their farmers and cottagers. When we consider how greatly the beauty of the margins of all our roads, is increased by this practice, and how much it tends to increase the comfort and happiness of the cottager, we cannot too highly express our admiration of such practices."

The stimulus of donations, to induce them to plant, is very properly and judiciously applied to *tenants;* but *freeholders* have encouragement of another kind to provide the cheapest and most wholesome of all luxuries for their families. In our third and fourth volumes this subject has been discussed in a series of essays.

Agricultural Societies.

"Agriculture in Britain may date its *first* improvement from the introduction of clover and turneps from the Netherlands, and its *second* from the introduction of the drill system of cultivation. Towards the end of the last century, a Metropolitan Agricultural Society was established; and the fashion of forming agricultural societies became general throughout the counties. These societies including their parent, the Board of Agriculture, for the most part died away with the fall of price, which took place after the general peace; but *they have since revived,* and several district societies, both in England and Scotland, by their exhibitions, by the their premiums, and by the means which they afford to agriculturists of becoming personally acquainted with one another, are doing much good."

Agricultural Museums.

"Connected with these societies, has sprung up a new source of agricultural improvement, which promises to have extensive influence, viz. agricultural museums. Something of the kind, applicable to manufactures as well as its agricultural productions, has taken place for several years in Paris, and we believe in some other towns on the Continent; and to a certain extent at the cattle shows of the Smithfield Club, and of the Highland Society of Scotland; but it remained for a spirited commercial house, Messrs. Drummond, Seedsmen, Sterling, to be the first to form an agricultural museum in Britain. Similar museums have since been established by Messrs. Dickson and Turnbull, seedsmen, Perth, by Mr. Lawson, seedsmen, Edinburgh, and others. The establishment of such exhibitions are so exceedingly useful, that it is to be hoped that they will be generally adopted by the agricultural societies. We are happy to find that the present enlightened professor of agriculture in the University of Edinburgh, Mr. Low, is forming a museum of models and specimens of productions for the use of his class. It appears to us, that in every college there ought to be, not only a professorship of agriculture, but such a museum as that which is being formed by professor Low. There is no man likely to be sent to College, whatever may be his pursuits in after life, to whom a knowledge of botany and agriculture would not be extremely useful."

Potatoes for Planting.

"The superiority of *whole potatoes* to sets, when an *early crop* is desired, has been proved by Mr. Niven; and also the superiority of sets to whole potatoes when the object is a *main crop,* more especially when the bud or rose end as it is called in Ireland, is used. This superiority of sets to whole potatoes has been also proved by the experiments conducted in the Horticultural Society's Garden, and by various others."

The former result agrees with our own experience; but we have nothing *decisive* to say in regard to the latter, though we have often been very successful in using cut potatoes for the main crop.

Improvement among Laborers.

"The general taste for reading which at present prevails among the rising generation, and which has been chiefly brought about by the *Sunday Schools,* and by cheap publications, promises such an amelioration of the great mass, or poorer class of society, as will in time equalize it in all essential particulars, with those who are now considered the higher and middling classes. The greatest defect in the class of which we are now speaking, as it appears to us, lies in the education of the females, which is confined to a little reading and writing, instead of being extended to clothes-making and working of different kinds, and more especially to cookery. In this respect the German women generally have greatly the advantage over those of England.—A British gardener, though he is surrounded with the most excellent vegetables which Europe produces, and has liberty where they are not scarce to supply his own table from them, yet unless he has married a woman who has been brought up a cook, and who understands at least a little of French cookery, cannot get one of those savory stews and compounds which are made by gardeners wives on the Continent, at a tithe of the expense that is spent here in fuel and material for dishes far less agreeable and wholesome. It is quite a mistake to suppose French cookery expensive: it is in fact the most economical cookery in the whole world, since its leading principles are to get the greatest possible quantity of nourishment out of a given quantity of food, with the least possible quantity of fuel, and to waste nothing."

Acclivity of Roads.

"For the improvement of roads some legislative measures have passed; but there is still wanting one to prevent new roads which are being made, or existing roads which are being altered or improved, from having a greater slope* than some fixed standard, say 1 in 36. Till such a law is passed, and carried into execution throughout the country, there must, of necessity be an aristocracy among travelers; for on roads having hills steeper than the slope we have mentioned (viz. 1 in 36), the traveler with one horse can never come into competition with him who travels with two: not that under any circumstances, as much can be done by one horse as by two horses on the same road; but that on a road of the slope of 1 in 36, one horse will draw or carry half of what two will; while on roads of a greater slope, it is known from experience that this is not the case: and the fact may be accounted for from the friction of the wheels on the road being equal, and the weights unequal. The man therefore who travels in a two wheeled carriage with two horses as a commercial traveler, has an undue advantage over him who can only travel with one horse."

We have introduced this paragraph to show our readers the kind of slopes that are recommended in England,—a subject which has received too little attention in this country, both by the legislature in its charters for turnpikes, and by the commissioners of highways in regard to our common roads. What a great improvement it would be, if our turnpikes and other roads were altered, so as to ascend not more than one foot in 18! or ever 1 in 10!

*We have occasionally observed a want of precision in the employment of this word. Webster says that SLOPE is "*properly* a direction downwards" and therefore a *great* slope is a *steep* slope.—*Ed. Gen. Far.*

Commercial Intercourse.

"The intercourse between the seedsmen of France and Britain has much increased, especially in what relates to agricultural seeds; and also the intercourse of the Parisian seedsmen (especially that of M. Vilmorin & Co. who are the first seedsmen on the Continent and indeed in Europe) with America."

An Imperial Gardener.

"The late Emperor of Austria was not only a great lover of gardening as an amateur; but actually spent a portion of his time, almost every fine day, in a gardening dress, digging, hoeing and pruning, planting and transplanting, potting and shifting, and watering and syringing, like any garden laborer. The present emperor is said to possess the same taste, though not in such a decided manner."

The Red berried Elder.

Captain S. E. Cook, has "brought a beautiful variety of *Sambucus racemosa* from the Pyrenees." We have *not* observed any notice of this species having been introduced into the United States.

Ornamental Plants.

"Our last letter from Mr. Matthews, left him at Lamas, in the interior of Peru, a country the hills and mountains of which are covered with forests which have never been penetrated by Europeans. Mr. Matthews at the time he wrote, had not advanced farther than a few yards from the margin of the river up which he ascended with a canoe to the town of Lamas; but even in that limited range, he had discovered several new animals and plants. Dr. Lindley in the *Botanical Register* for the present year speaking of the collections of dried plants sent home by Mr. Matthews, says that he found among them a larger number of very beautiful species than he ever had the good fortune to meet with in any other collection that he had examined of similar extent."

Many plants from the mountainous regions of low latitudes, are hardy, as we may instance in nearly all that have come from the upper parts of South Carolina and Georgia, and in several from Nepaul; but in *Œnothera rosea* we have a native of Peru which has become naturalized in our gardens, and abides our winters without injury when protected by a few fallen leaves, and in some seasons even without this shelter. We may therefore hope that a part of those which have been newly discovered in that country, will prove to be hardy.

COMMUNICATIONS.

LETTERS FROM A FATHER,

Living in the State of New York.

To his Son in Western Pennsylvania.

NO. XI.

On the Culture of Oats.

To MY SON—According to the order of nature, oats follow corn. They are generally cultivated next after corn, and it is believed they are next in regard to their intrinsic value. As therefore corn was the subject of my preceding letter, the culture of oats may, with perfect propriety, be the subject of this.

It has been seen that oats can be used with tolerable advantage as fallow crops, preparatory to the culture of wheat, but, independently of their use for such purposes, they are unquestionably, next to wheat and corn, the most valuable species of grain that is cultivated in this country. Oats need only to be hulled, and otherwise properly manufactured, to become a useful article of bread stuff for the support of human life. But the principal and almost only use that has been made of them in this country, has been to give them, in different states of preparation, to stock. Every part of the oat crop is valuable—the straw for fodder, and the grain itself for the other uses of provender. To all sorts of stock, from the hog to the horse, oats are capable of supplying an article of nutritious and palatable food. That, as provender for horses, they stand at the head of the grain family, is, I believe, universally admitted.

Little danger need be apprehended, that the oat market in this country will be overstocked. To supply horse teams, employed on stage lines, canals, rail-ways and the like, the call for oats is already very great, and it will be annually increasing. Oats then may be cultivated to any extent, with a good degree of certainty that they will be saleable in the markets at fair prices. It is scarcely possible that the produce, in any year, can exceed the consumption.

To cultivate oats successfully, good tillage and skillful husbandry are no less necessary than in the culture of other crops. It is, I believe, universally admitted, that oats, the better to ensure a plentiful crop, should be sowed as early in the spring as the weather and state of the ground will permit. There is no danger, if the ground be in proper order, of sowing them too early. If oats are sown after corn, as is, so far as I know, the general practice, the ground should be ploughed and harrowed before the seed is put on, and afterwards harrowed again to cover the seed.

As nothing has yet been said, in these letters, relative to the proper depth of covering or planting seeds, and as the subject is important, I will now advert to it, although it may require a small digression from the main subject of this letter. It is not a matter of indifference at what depth below the surface of the ground seeds are placed, whether they be oats, or wheat, or any other species of grain or of plants. Three agents are necessarily employed in causing seeds to vegetate, and plants to grow. These are air, heat, and water. If seeds are buried too deep under the surface of the ground, they are, in a measure, excluded from the agencies of air and heat, and of course they either do not vegetate at all, or if they do vegetate, the plants are sickly and feeble. If seeds are buried too superficially, they sometimes, in case of dry weather, lack moisture, and for that reason they either perish, or the plants at first maintain only a sickly and feeble existence. These remarks seem to suggest a general rule, applicable alike to all cases of seeding. The rule is, to cover the seed at such a depth below the surface of the ground, as will secure in its behalf, and in the best manner, the combined agency of air, heat and water. This is always near the surface. To cover seeds deeper than is necessary to secure about them a sufficient degree of moisture to make them vegetate and take root, is covering too deep for the benefit of the crop. To cover oats, or wheat, or any other grain, with a plough, turning over a furrow of common depth, places the seed too far beneath the surface of the ground. In general, it is better, in such cases, to cover with a harrow, or, if a plough be used for that purpose, it should operate only superficially. In planting corn, care should be taken neither to make the holes too deep, nor cover too deep. It is, however, absolutely necessary to make the holes deep enough to secure for the seed a moist bed of earth, and when this is done, the covering should be only quite superficial. I consider these remarks as important, and having made them, I will now revert to the main subject of my letter, the culture of oats.

It is believed, the soil of your farm, as well as that of most other farms in your vicinity, is peculiarly adapted to the growth of oats. If such be the fact, it is the more important that you, and your fellow citizens, understand the various methods, and especially the best methods of cultivating the oat crop. Not unfrequently, as we are informed, oats are cultivated to advantage on green sward. This I have not witnessed, but I have no doubt of its practicability. Oats too may be cultivated on wheat or rye stubble, and for aught I know, on buckwheat stubble. But whatever method be adopted, or whatever may be the state and condition of the ground on which oats are to be sown, I maintain that the tillage and preparation for this crop, no less than for any other, should be performed with care and precision. Many farmers seem to act under the impression, that oats, being a hardy crop, will grow well enough without having much done to prepare the ground for their reception. The consequence is, that they obtain only small and unprofitable crops, when with a trifle more of expense, they might obtain crops of a superior order. If oats are to be cultivated on stiff grass ground, the sward should be turned over, and otherwise managed, in all respects, precisely as if corn were to be planted upon it.

It is generally agreed, that about two bushels of oat seed is a sufficient quantity for one acre of ground. It certainly is so, if the sowing is performed at the right season, and the ground be in good heart, and properly prepared. I am not sure that a smaller quantity would not, in some cases, be better. But if the sowing is deferred till late in the spring, or if the ground is not rich, or is not well cultivated, it may be better to increase the quantity, and sow more than two bushels on an acre. The oat crop sometimes yields at the rate of sixty, seventy, and perhaps eighty bushels per acre. But these are rare crops. It is believed the average produce should not be rated higher than thirty-five bushels per acre.

Of the oat family, as well as those of the other grains, there are many varieties. It is not to be supposed that they are all equally meritorious, or equally adapted to any particular soil or location. It is worthy of much greater care than is generally taken by farmers, to procure the best varieties of all the cultivated grains. Recently there has been introduced to this country a new variety of oats; and at this time there prevails a highly excited expectation that they will prove to be a valuable acquisition to the husbandry of the country. They are called Skinless Oats, because they have no hull, nor any thing like that husky integument which envelopes the oat kernel. The grain is said nearly to resemble the naked oat kernel itself, when divisted of its husky integument. These oats are said to be natives of some of the high northern latitudes of Asia. Their excellence is supposed to consist both in their abundant produce, and superior quality, the former frequently, as it is said, amounting to eighty bushels, any sometimes more, from an acre. They are also said to be much heavier, and of course to contain more nutriment than other oats. They are no less palatable and nutritious to stock than the oats now in use. And as they have no hulls, and are already as nature leaves them, in a state of perfect preparation for the flouring mill, if indeed they need flouring to fit them for use as an article of bread stuff, it would seem they may become doubly useful, supplying food to man as well as to beast. I intend to procure from Albany this winter, a small quantity of these oats for my own use, and if possible I will send some of them to you.

In regard to the manner of harvesting oats, farmers are, in general, obstinately attached to old usages and customs. The sentiment prevails extensively among them, that they must be harvested in a way that will admit of binding them into bundles. It is supposed of course that they must be reaped or cradled. When the crop stands up well, not having been beaten down by the winds and rain, this is unquestionably the best way of harvesting them. But when oats are badly lodged and tangled, as they are more frequently than any other crops, to reap or to cradle them often becomes a difficult operation, to be performed only with much hard labor and expense. In such cases there is unquestionably a better and more economical way of harvesting the crop, and yet it is with difficulty that farmers can be persuaded to adopt it. However badly oats may be lodged and tangled, they can generally be cut quite expeditiously with a naked scythe. They can subsequently be raked into bunches, and when dry enough, gathered to the barn, with no other difficulty than when hay, or any other unbound crop, is to be gathered. In this way the crop can be harvested as neatly as in any other, and with no greater waste of grain. The threshing will scarcely be more expensive, especially if the grain is to be trodden out with horses—the straw will be equally valuable, and the saving of labor very great. In this way I have practiced, during a series of many years,

when my oats were badly lodged and tangled, and the results have been entirely satisfatory.

New York State, Jan. 1836. A FATHER.

Cultivation of the Chinese Mulberry:

Extracts from the letter of Joseph Davenport to William Kenrick, with Remarks.—No. 4.

BY W. W. B.

Thus far the writer has spoken of the soil and situation best adapted to the growth of this tree in our climate. What is said in the following extract, is in reference to the kind of soil best for the production of good silk.

14. "The soil best for the production of good silk is another view of the subject, of which I shall now say but little. The warmer and sweeter the soil, wherever found, the richer the foliage and the better the silk will be of course. The hottest sand soil that trees ever grew on, will produce the best silk, all fruits and vegetable productions being more or less nutritious and high flavored as heat prevails in the soil in which they grow. The prevalence of moisture, as in the night and wet days, by causing an abundant flow of sap, relaxes, expands, and increases the growth of plants—the heat that prevails in the day, and in drouth dries away the watery parts, sweetens and matures the growth as it is acquired—then as moisture expands and heat condenses, moist soils may produce the greatest quantity, and not the best in quality. Those persons who pronounce this or that Mulberry superior for the production of the finest silk, will do well to recollect that the foliage of the same tree may vary as much in quality by growing on different soils, as the products of the same aromatic plants grown in torrid and temperate climates. That soil should be selected for the business that will be the hottest, and at the same time safest, in regard to the health and vigor of the tree. The kind of tree should be selected best adapted to, and that will produce the greatest quantity of foliage on poor soils. This I think is the Chinese Mulberry. It is yet to be learned how poor a soil it will flourish in. As yet I have not put it on any land too poor for it—though I have set it on light sandy loam, that would not produce eight bushels of rye to the acre—where it grows quite fast enough, and the soil has gradually been improving."

All writers on the cultivation of the Mulberry affirm, that the dryer and warmer the soil, the better will be the quality of the silk, though the quantity of the foliage will be less. But there is another consideration, though a less amount of leaves would be produced upon a poor, dry soil, yet a given weight of them will undoubtedly go farther, and make a greater quantity of silk, than an equal weight of leaves from a soil which is moist and rich—the latter containing more watery particles and less silky matter in proportion to their bulk. It is certainly a great recommendation to the Chinese Mulberry, that it will flourish and even do best on a poor soil, or on one of but medium quality. How many acres of sterile land are there to be found in some parts of our country, which might thus be most advantageously improved. What better use could be made of land "which would not produce eight bushels of rye to the acre," than to plant it with this valuable tree, which would in a few years yield annually several hundred dollars per acre by converting its leaves into silk? Many a poor man with a few acres of land, who now finds it hard to support a dependent family, might thus soon, with industry, place himself and family, not only above the reach of want, but above competency.

15. "I would recommend to any one wishing to engage in the silk business, to set out as few or as many as he can afford; but at any rate set the Chinese Mulberry four by three, or four feet apart—then multiply them by layers and cuttings, (not by inoculation and grafting,) till they have covered as much ground as wished for—the trees to be kept within reach, and continued in large plantations. I think one man, constantly employed with a horse plough and cultivator, after the first season, may give fifty acres of free soil all the cultivation necessary."

The reasons for setting the trees at this distance the writer does not give, but there are obvious ones. A less quantity of ground would be requisite than if they were placed at a greater distance—the trees would soon occupy the whole ground—there would be sufficient room to pass between them with a plough and cultivator both ways, if set in regular rows—the trees would be kept of moderate size, and the leaves thereby easily gathered, and the ground in a few years would become so shaded as to need probably but little farther cultivation. In China it is said fields are set out in this way: When a plantation is made, holes are dug about a yard asunder, into which some rotted manure and good earth are put; in each hole several cuttings are placed, which growing soon cover the field with luxuriant foliage. We should think this a good method to form a plantation in this country, omitting the use of the manure. The reasons for the writer's advice to "multiply this tree by layers and cuttings, and not by inoculation and grafting," are probably the great facility with which it may be increased by layers and cuttings, and the difficulty of increasing it by inoculation and grafting. It appears that only about one-third of his grafts lived, and most of his buds, starting the same season, were killed the succeeding winter. We were not aware that it was more difficult to graft the mulberry with success than the apple. In budding we have experienced the difficulty complained of by the writer; but might not this be partly obviated by not cutting off the top above the bud till the next spring? We will suggest another plan, which we think would succeed, though we have not tried it. Instead of buds of the same season's growth, let buds be taken of the preceding year's growth, and set as early as the bark will peel freely, which would be in the latter part of the month of May; the buds for this purpose to be taken from scions cut in the fall or spring. As soon as the buds start, let the stock be cut off above; the buds having the whole season before them, and the whole strength of the root, would be likely to form wood as well ripened and prepared to endure the winter as a graft. The only reason we would prefer raising this Mulberry by grafting and inoculation, is, that it has been satisfactorily proved, that the grafted and budded trees are hardier, and stand the winter better, than those growing on their own roots. We have several budded trees which ripened their wood well last fall, though not very favorably situated, and are now fresh and green within a few inches of the extremities of the shoots.

16. "The White Mulberry, but should prefer the Dandolo, I would set by roads, fences, &c., for standard trees, so that all parts of a farm might be contributing to forward the business in every possible way."

These trees thus disposed, would greatly embellish the farm, while they would yield a great quantity of leaves after a few years. Of all the varieties of the White Mulberry, the *Dandolo*, (called after the celebrated Italian silk culturist, Count Dandolo, who introduced it into notice,) is considered the best on account of the size and abundance of its foliage. We would add one suggestion more: let hedges be formed of the White Mulberry for fences. It is said to form an excellent live fence. W. W. B.

Rest.

BY NIAGARA.

The laboring husbandman, after a hard day's work, with great composure goes to *rest*—and he finds it indispensible to his next day's labor; and indeed he would soon wear out if he had not his regular seasons of rest. But were he to go to rest *supperless*, and to his work the following day in the same condition, I am inclined to think he would soon run down, although he should *rest* half the time. So with his team. I have been a little journey—my horses were in good heart, and I drove them, on the last day of returning, about 70 miles. Well, now they must rest, at least for the night. And what would my neighbors say, should I leave my horses to *rest* with an empty rack and manger? To be sure, they would say that my team would soon fail me. So exactly would I say to them when they treat their lands in the same manner. Now, Mr. Editor, this is no joke, neither is this fashion of treating lands of very seldom occurrence. And what is the result? Precisely as with the team. The lands fail—they become hard—the crops diminish, and will scarcely produce sufficient to pay the expense of cultivation. There are many farmers (so called) within my acquaintance, who treat their lands in this manner, and find by experience that the above is the consequence. One of this class, (though wealthy, having a very large farm,) with whom I have conversed to-day on the subject, says, when I invited him to become a subscriber to the Genesee Farmer, "What do I want of the Genesee Farmer? I know it all now. Do you think the Farmer can teach me, who have been a farmer from my youth, and am now 55 years old?" Another of this class says, "I am not able to take the paper—I wish I were—I should be glad to read it, but I am not able to pay for it, I have so many ways for money—so many things that I *must* buy for the support of the family. I have no pork, no potatoes, no corn, and the winter set in so early that my apples are all under the snow." Well then, said I, my advice is, that if you can raise money no other way, mortgage your farm for $38—take the money and pay $2 for the Genesee Farmer, $16 for two bushels of clover seed, and sow it on your wheat, $10 pay for plaster, and sow it on your wheat also, immediately after the sowing of

the clover seed, and the balance pay to any man who will agree to clear your barn-yard of manure, and put it on your ground for corn and potatoes next spring. Then read the Genesee Farmer attentively for the after course, and follow up the directions, and I venture to assure you that you will have plenty of corn, potatoes, and pork, at least for family use. Your apples will not lie under the snow another winter, neither will they be *drank*, but eat! and you will not be troubled to get money to raise the mortgage on your farm.

So much for my advice to this neighbor, and if you think it such as will be of use to any of your readers, you are at liberty to insert it.

Respectfully, NIAGARA.

Lockport, January 28, 1836.

Highways and By-ways,

And an Embryo Machine for breaking and pulverizing Clods.

BY CORNELIUS PLOCKER.

It is said they that reprove us may be our best friends. This precept concerns my friend, who has so ably confuted most of my statements—mistatements I ought to call them—in the Genesee Farmer of the 13th of this month, and whose communication I believe to be correct, except his assertion that "England has no by-way roads." I scarcely think it possible that she has not now; but I know she had them until 1817. There were then even two sorts of by-ways, at least in the eastern part of the county of Essex—namely, those running through farm-yards from one village to another, or to another road, and which with permission of the farmer were mostly used, if we exclude himself, by the neighbors. A short altercation was lately related to me, as having taken place between a farmer and a person whose appearance indicated consequence and superiority, which may tend to illustrate how far this permission was granted and abused. The latter, on coming through the farm-yard, said to the farmer—"I shall endite (sue) you, if you don't mend this road." To which the other replied—"You had better mind what you are after—you are yourself upon trespass." An explanation on the badness of the road then ensued, and they parted. These I have certainly heard the name of by ways given to. The other sort of by-ways, but which I do not remember to have heard that appellation bestowed upon, were or are those open to the public, running from one town, (large village or market place as we should call it here,) to another town, village, ferry, heath or common, upon which no stage or mail coaches did or could well pass along, and upon which there were no turnpikes nor any mile stones. I could name some of these towns, villages, &c., where these by-ways are or were situated; but this, I think, my friend or our readers cannot take any interest in. I shall however name two or three of them, running from one place in different directions to other places, namely: from the town or borough of Malden to Witham, 4 miles—to Tiptree-heath, 6 miles—to Farm Bridge ferry, 7 miles. If these, and others lik them, are high-roads and not by-reads, then my friend is right; but I do not yet consider it so.

I like energetic language, and accept most good humoredly his rebuke, although now 51 years old, to learn wisdom form the experience of others, and to correct my faults from their failings. His irony about my supposed dreams and lucubrations I also take in good part, and as a bitter may be as salutary to the mind as it is sometimes to the body, I am grateful for the application of the word malice.

I should have been sooner with this reply if I had not expected a confirmation of either my friend's or some of my own statements. None having appeared, I proceed with my answer to his statements. He has seen and heard more of Old England than I, who have only been ten years in that country, three of which among farmers and farmer's men, from whom I derived my information about their labors on the road, and that the starting at midnight to do road duty was an occurrence that took place two or three times every year among most of the farmers in the vicinity of the river Thames east of Tilbury fort. During my travels in England also, I have sometimes heard the topic started, of the injustice that the farmers, and they alone, had to do the labor on the roads, a burden which had come down to them from the feudal times; but never had I heard, until I read my friend's communication, that the proceeds of the tolls were applied towards mending the roads, nor had I heard of a law or custom there, limiting the labor of man or beast on the road to eight hours a day. As to what my friend relates about a road here that was damaged more than twenty-five dollars by being mended, it put me in mind of a similar incident, which happened to me and others on a stage coach traveling on level ground, at a place where the road had been recently mended: the horses drawing so hard through the gravel that the coachman desired the outside passenger, (of which there were, as there generally are in England, more than those inside,) to alight and walk till we came to the hard road, which was done accordingly. I think that road had also been made more than twenty-five dollars worse by mending it.

As to the phrase in which the words generations and perhaps appear, upon which my friend lays so much stress as to recite it twice mostly in italics—I alluded to roads which I thought to be a thousand years old, (it is even said there are some in England that have been made by the Romans,) which were not better than those made in this country thirty years ago.

With regard to the expenditure of one hundred and thirty pounds sterling ($624) per mile on forty miles, what jumping and scratching there must have been to get at the administration of all that money! I deem it improper to use better language towards a vile and sordid aspiration. To perceive that he is of the number of those who wish for a law to "compell us" to pay in dollars and cents for the maintainance of the roads, is a matter of regret to me. Is not the multiplicity of offices of emolument the source of servility, bribery and corruption,—evils as bad as bad roads?

I shall now retreat from the field of controversy, acknowledging to be defeated by the uncommon, I mean superior, talents of my friend, for I am by no means a match, and I take my leave with the wish that his fertile genius may yet engender many productions for our entertainment and benefit.

Nota bene.—My friend is quite mistaken if he thinks that I dislike foreigners. I love them almost as much as I love my own countrymen, be they Jews, Moslems or Heathens—in fact, whites or blacks. Peace on earth and good will to all men.

As I dot know of there being any implement yet invented for effectually breaking and pulverizing clods or lumps of clay thrown up by the plough, it has struck me, (the land being free of stones,) that it a roller, fluted or spiked like the cylinder of a threshing machine, were fixed above a road scraper, with two wheels attached to the roller by means of two stout pins driven into the centers of the roller and centers of the wheels, so that the roller must turn with the wheels; and if the scraper was suspended close to the ground, or upon it, on the pins or axles as they may be called, so that it can take up the clods by lifting the handles of the scraper, it would operate so as to produce the desired effect—it being understood that the roller must be somewhat smaller in circumference than the wheels, so as to leave room for the earth to pass between it and the scraper at the same time that the team is drawing and a man is holding the concern by the handles of the scraper. In case it should be thought that the hardness of the clods will prevent the roller from turning and cause the wheels to slide, or that the roller will not take hold of the clods, but suffer them to accumulate before it, then I know of no remedy, and will not recommend the trial of it; but if on the contrary somebody should think it would work well, then I would recommend a log of heavy wood for a roller, pins and wheels in one piece, which it would not take much time, and but little art, to make, and hang a road scraper, or something like it, on the pins under the roller, and the machine is completed. I think I hear my readers say, why don't you make and try the thing yourself, and tell us the result? I answer, my circumstances will not admit it, having neither means nor leisure to make experiments; and my neighbors as well as myself are too busily occupied in clearing our land—besides, the thing would be of little use to us as yet.

C. PLOCKER.

North Murray, Orleans co., Feb. 25, 1836.

On Making Maple Sugar.

BY SHADE.

The season for making sugar from the sugar maple is at hand, and every farmer who has a supply of hard maple trees, should be prepared to commence their sweet operations the first thaw that occurs in March; and no one who has the means should neglect the opportunity of supplying themselves with this kind of sugar, as it is the cheapest, and, if properly manufactured, is the purest saccharine matter that can be obtained. It is one of the most necessary luxuries.

I will not now speak of the subject generally, or the manner of manufacturing this kind of sugar. One of your numbers contains a very good article, from one of your correspondents in this place, on the subject, giving a brief outline of the sugar apparatus, &c. But there is an error in that article of no small importance, and it is an error which generally obtains throughout

the country. I refer to the manner of tapping the trees.

The old and destructive mode of cutting the tree with the axe is generally, and should be entirely, abandoned. The common practice is, to insert in a hole, bored with a bit about half an inch in diameter, a spout to hang the sap-tub on; three or four inches higher, and nearly over this, one or two others are placed, with the expectation of getting more sap by having several spouts. This is not the fact, as any one may find, by trying the experiment, that one incision is as good as more, unless they are placed on opposite sides of the tree, or remote from each other, and then they require separate tubs.

It is a curious fact, that the sap, on flowing through the pores of the wood, is so compressed that on making an incision, the sap is forced into it from the surrounding wood to a considerable distance on each side. The pressure being removed from one point, a vent is made for the pent up sugar-water to escape, and all will flow from one that can escape from several incisions made in the same vicinity.

Our young and thrifty maple groves are constantly becoming of more importance, and pains should be taken to injure them as little as possible in procuring the sweet.

Any one may see, by putting in one spout when the sap runs fast—the drops will rapidly chase each other from the end of the spout—place another in the usual way near this, and the drops from the first fall less frequently—introduce a third, and they run but slowly, and will fill the bucket no sooner than one spout.

Try it, and you can save not only the additional spouts and labor of setting, but the injury done your trees by uselessly cutting them.

East Bloomfield, March 1, 1836. SHADE.

The Freezing Well of Mendon.

BY L. B. L.

I would account for its freezing during the continuance of cold weather in this way: it is fed by the infiltration of surface water, cooled down to the temperature of the atmosphere, which meeting with the impervious stratum of clay, which in that spot basins, or is depressed to the depth of the water in the well below the general level of the clay bed, and which cuts off the source of the uprising water from below, and which is reached in the adjacent well, and also shows itself in the unfreezing springs of the banks.

Now all this is rational, and probably would be of easy solution by a little attention to the geological structure and relative position of the rock formations, or earthy depositions of this locality, were it not for the statement that ice remains in the well until late in June.

The average temperature of the earth, as far as it has been penetrated, is about 52 degrees of Fahrenheit, and but few spring waters are found below that temperature, although the writer has observed some as low as 47, but they are rare; and the water of this well must continue as low as 32 during the three spring and one of the summer months, or the ice would disappear; and this low temperature would require the whole lower mass of earth, in contact with the water, to remain at that temperature, or the intervention of a most effectual non-conductor.

If a fact, it renders it a most unaccountable one, and requires further observation and examination, particularly as to the temperature of the water for every month in the year, and the attention of H. A. is solicited to that point.

L. B. L.

Rutland, Jefferson co., February 8, 1836.

MR. TUCKER—As I have kept a record of the weather for five years back, I send you an account of the first week in this month, as I think it may interest some of your readers.

Day of the month.	SUNRISE.		NOON.		SUNDOWN.	
	Above zero.	Below zero.	Above zero.	Below zero.	Above zero.	Below zero.
1	....	11	....	0	....	12
2	....	32	....	15	....	10
3	...	20	4	....	....	0
4	....	33	1	....	....	14
5	....	40	....	6	...	14
6	....	27	10	....	....	2
7	8	....	32	....	16	....

On the morning of the 5th I put a small quanity of quicksilver into a teasaucer, and had the pleasure of seeing it freeze solid. The morning of the 17th of Dec. last was 4 degrees colder.

Your friend, MOSES EAMES.

☞ List of payments necessarily deferred till next week.

Albany Nursery.

THE proprietors are happy to announce to their patrons, and the public at large, that in addition to their ordinary supply of Fruit & Ornamental

TREES, SHRUBS AND PLANTS,

they will have for sale, when the spring opens,

5000 Pear Trees,
2000 Plum Trees,
1000 Cherry Trees,
300 Apricot Trees,
200 Back European Mulberry Trees,
100 Double white flowering Hawthorn,
100 New Scarlet Hawthorn,
1000 Gooseberries, selected sorts,
200 Assorted Grapes, for Grape Houses,
1000 Filberts,

Together with yellow and scarlet flowering Horse Chestnuts, Mountain Ash, Salisburia adiantifolia, new Roses, Dahlias and Green-House Plants. The whole have been selected by one of the partners, principally in the London Nurseries, packed under his direction, and were shipped the 10th February. From the experience of several years, we presume they will reach us in good condition. The Pears embrace all the new Flemish and French varieties, several of which were in eating when the selections were made early in January. The other Fruits are also selected with reference to their good quality. Their assortment of Dahlias will now comprise five to six hundred varieties, embracing the finest of Europe as well as America. The Gooseberries have been selected from the finest collections in England and Scotland. There will be no advance in ordinary prices.

Orders, post paid, with responsible references, will be promptly attended to. BUEL & WILSON.

mar 12-f3w

Robbins' Planting Machine.

WITH this Machine Corn, Beans, Peas, Broom Corn, Mangel Wurtzel, Turneps, Onions, and seeds of almost every description, can be planted with more system and correctness than can be done in the usual manner of planting with the hand and hoe. One man may easily plant five acres a day, placing the seeds any given distance apart, from two or more inches, and in rows two and a half feet apart.

Machines can be had by applying to REYNOLDS & BATEHAM, Rochester; C. N. BEMENT, Treasurer of the State Agricultural Society, Albany; BUSHROD BUCK, Lanesborough, Berkshire county, Mass.; and DANIEL T. BUCK, Lowville, Lewis county, agent and proprietor for making and vending said machines, at all of which places it is intended to keep a supply on hand.

Lowville, Nov. 24, 1835. nov 28-6m

New Superior Varieties of Vegetables.

EARLY white Flageolet Bush Beans, *earliest of all and excellent.*
Dwarf white Soissons do. *very productive and nearly stringless.*
French straw colored Dwarf do. *extra early and very productive.*
Large white Soissons Pole do. *excellent green, and when dry equal to the Lima, much earlier and far more productive.*
Early Primitive Pea, *earliest of all.*
Keen's Seedling Pea, *extra early.*
Early Warwick do. *extra early.*
Dwarf green Marrow or Waterloo Blue do. *very fine.*
Groom's superb Dwarf Blue do.
New Grotto Marrow Pea, *very superior.*
Knight's Tall and Dwarf Green Marrow Pea.
Early white Sugar Beet, *sweetest of all.*
Earliest French Cabbage,
Arklie's early Dwarf Cabbage, *extra early.*
Early Emperor do. *very fine and early.*
Bonneuil do. *monstrous heads and finest for autumn.*
Green Paucalier Savoy, *finest of all the Savoys.*
Quintal, *largest for winter for table or cattle.*
Long white Carrot, *sweetest of all.*
Large solid violet Celery, *forms strongest stalks.*
French green table Cucumbers, *medium size but very productive.*
Spanish long green do. *some measured 22 to 24 inches the past season.*
Long Ridge or Hand-Glass do.
Piedmont yellow six weeks Corn, *earliest of all.*
Moore's early yellow do. *very early.*
Early curled Silecia Lettuce or Curled Ice.
Naples curled Cabbage do. *very large, superior, and of beautiful appearance.*
Large Calais Cabbage do. *large heads and very fine.*
Large French Blonde Coss do. *superior.*
Green fleshed netted Romana Melon, *large and superior.*
French Muscade do. *green fleshed and fine.*
Imperial Melon, *rose colored flesh.*
Malta winter do. *very solid, green fleshed, and keeps till February, and above 20 other fine new varieties.*
Early silver skinned Onion, *new and earliest of all white varieties.*
Early red Madeira do. *earliest of all the red varieties.*
Two Bladed Onion.
Early turnep rooted Parsnep.
Yellow tomato shaped Pepper.
Spanish Cheese Pumpkin, *very solid and superior.*
Seven years or long keeping Pumpkin.
Earliest French Scarlet Radish.
Flanders large leaved Spinach.
Monstrous bush Squash, *for summer.*
White Cushaw do. *for autumn.*
Large Teneriffe do. *keeps till March and makes very superior pies.*
Yellow Altringham Turnep, *superior.*
White Swedish Turnep, *devoid of the Pumpkin flavor, and more delicate than the yellow variety.*
Berlin or Teltau do. *par excellence.*

This list embraces but *a few of the newest* varieties. All applications to be made direct per mail, and priced Catalogues will be sent *gratis* to all who desire them. The stock of seeds is the most extensive in America, and the prices in quantity to venders are very moderate, and a convenient credit will be allowed. Of Flower seeds above 600 varieties.

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REAL ESTATE BROKER,
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February, 1836. feb 20f6m*

1000,000 Silk Worm Eggs,
FOR SALE.

THE subscriber having promised to supply so many individuals who called to see his worms at work last year, and he having already sold so many, deems it proper to advise those who have not yet received any, and are intending to have some, that they must order them at once, or possibly they will be disappointed, the demand being so great, and this being the proper season to forward them. They are sold for 25 cents a thousand. Orders enclosing the amount will be punctually attended to.

JAMES HOUGHTON.

Rochester, Jan. 7, 1836, j7f3m

Watered Meadows.

When land has been covered by water in the winter or in the beginning of spring, the moisture that has penetrated deep into the soil, and even the subsoil, becomes a source of nourishment to the roots of the plants in the summer; and prevents those bad effects that often happen to lands in their natural state, from a long continuation of dry weather.

When the water used in irrigation has flowed over a calcareous country, it is generally found impregnated with carbonate of lime; and in this state it tends in many instances, to ameliorate the soil.

Common river water also generally contains a certain portion of organizable matter, which is much greater after rains, than at other times; and which exists in the largest quantity when the stream rises in a cultivated country.

Even in cases when the water used for flooding is pure, and free from animal or vegetable substances, it acts by causing the more equable diffusion of nutritious matter existing in the land; and in very cold seasons, it preserves the tender roots and leaves of the grass from being affected by frost.

Water is of greater specific gravity at 42° Fahrenheit than at 32°, the freezing point; and hence in a meadow irrigated in winter, the water immediately in contact with the grass is rarely below 40°, a degree of temperature not at all prejudicial to the living organs of plants.

In general, those waters which breed the best fish, are the best fitted for watering meadows; but *most of the benefits* of irrigation may be derived from any kind of water. It is however, a general principle, that waters containing ferruginous impregnations, though possessed of fertilizing effects when applied to a calcareous soil, are injurious on soils that do not effervesce with acids; and that calcareous waters which are known by the earthy deposit they afford when boiled, are of most use on siliceous soils, or other soils containing no remarkable quantity of carbonate of lime. —*Davy's Agricultural Chemistry.*

Heating Rooms with Hot Air.

Messrs. Kendrick and Elwell of Gardiner, in this county, have invented, and secured by patent, a somewhat new method of warming Houses by hot air, in the following manner. A box or chamber is made of cast iron, say 6 or 8 inches square, and as long as the back of the chimney is wide. The chamber is fitted into the back of the chimney, or rather to it, as it projects out from it. At one end is a tube which runs under the hearth, into the cellar, or out of doors, through which the cool air passes into the chamber. At the other end is placed a tube which rises up the chimney a little way, and then passes through the breast work, and runs along to the back part of the room, and bends down to near the floor; or it may be conducted off into some other room. A fire is built in the fire place as is usual; this heats the chamber—the air within becomes rarified, passes off up the tube, and is thrown out at the end in a heated state; the cold air from without, passes in to supply its place, becomes heated in its turn, passes off, and its place supplied by another portion of cold air, and thus the process continues, so long as the fire is kept up in the fire place. A great saving of fuel is the consequence, as it requires but little to heat the air within, and this air being poured out in the back part of the room, the atmosphere becomes sufficiently warmed in a short time.

Mr. J. A. Pitts of this town made a similar invention last year, and we believe the parties have united, and will probably soon be ready to construct warming apparatus of the kind, to supply any demand.—*Maine Farmer.*

The Farms of England.

The farms are regularly laid out into squares and parallelograms, of from two to forty acres; and in general they are laid down as smooth a level as the roller can make them. Here is a luxuriant wheat field, and there a fine meadow, and next a rich pasture, and there busy preparations for putting in potatoes or turneps; and there barley or oats just shooting up from the dark and rich soil. But scarcely a rod of *fence*, such as we meet with every where in the U. S. of America, do you see in your two hundred miles ride from Liverpool to the metropolis. All is *hawthorn;* and these hedges, which are, for the most part, kept neatly trimmed, about the gardens and farm-houses, and by the road-side, add more to the beauty of the country, than any description had pictured upon my mind. The common method of making the hedge is this: first a ridge is thrown up, perhaps a foot above the level of the fields which are to be fenced off; then the young thorn is planted in two parallel rows, about a foot or eighteen inches apart. The growth is not very rapid; but when it has attained the height of four or five feet, in about as many years, it becomes so dense that no domestic animals would think of breaking through it. The leaf is small, deeply verdant, and beautifully serrated. In the month of May these hedges are clothed with a white fragrant blossom, very much resembling that of the thorn in our own country; and it is then that the honeysuckle and other wild flowers unfold their bright hues and mingle the sweetness with the hawthorn. In the hedges trees, such as the oak, the elm, and the horse-chestnut, are planted, sometimes in rows, near together, but oftener far apart, so that each one rises and waves by itself over the humbler, but not less charming growth below. Single trees of a great age, and very large, are sprinkled here and there in every direction, and every now and then you catch a glimpse in the distance, of a grove, or circular clump, which adds not a little to the beauty of the landscape.—*President Humphrey's Tour.*

The Roads of England.

There is hardly any thing, perhaps, which at first gives more pleasure to an American traveler, than the *roads* of England. They have not near so many as we have, especially in some parts of New England, where every man wants his own separate path to go in; but they are unspeakably better. Within the last few years, all the great roads throughout the kingdom have been thoroughly *Mc.Adamized;* and they are in more senses than one, "Royal highways." They are very wide, almost perfectly hard, and as smooth as any gravelled walk in a gentleman's pleasure grounds. Where there are hills, they are brought down, if possible, to a very small angle, or avoided, by turning a little to the right or the left—our older brethren having found out, some time ago it would seem, that it is as far over an orange as around it. Men are kept constantly at work upon these roads, breaking up stones for repairs, filling every little rut and depression as soon as it appears, picking up whatever may happen to lie upon the surface, and smoothing down the thin covering of earth which is spread over the solid basis. So perfect are these great thoroughfares, in winter and summer, that you can calculate, with moral certainty, at what time the Royal mail, from London, will reach the remotest towns in the island. A gentleman in Liverpool assured me, that there is scarcely five minutes variation, in the time of its arrival there, (a distance of more than two hundred miles,) from one end of the year to the other.—*Ib.*

Force of Prejudice.

The prejudice of our farmers against new implements, new modes of culture, and what they are pleased to call book farming, brings to mind an historical fact, strongly illustrative of the unreasonableness of vulgar prejudice. Walter Blith observes, that "it was not many years since the famous city of London petitioned the parliament of England against two nuisances, and these were Newcastle coals, in regard to their stench, &c., and hops, in regard they would spoyle the taste of drink, and endanger the people." These two nuisances have since become almost indispensable necessaries to the good people of London. And it will be found, that what the illiterate and bigoted farmer rejects as useless, will soon be found necessary to successful farming.—*Cultivator.*

Great Calf.

Mr. Elisha M. Jencks, of Ware House Point, Conn. has a Heifer Calf, which is presumed to be the largest that can be produced in this country, according to its age. Is of deep red—calved May 1, 1834, from blood stock—weighed, when 7 months old, 800 lbs.—10 months, 950 lbs.—12 months, 1065, and 20 months, 1345 lbs.—from a cow formerly owned by the late Samuel Slater, Esq. Providence, R. I., and she from an imported cow, and without any extra keeping.—*New England Farmer.*

Trees, Seeds, &c.

100 LBS. White Mulberry Seed, direct from the most celebrated silk districts in Italy.

75 lbs. White Mulberry Seed of American growth.

60,000 Chinese Mulberry Cuttings, perfectly prepared for planting.

2,500 Chinese Mulberries of large size, 900 of which are inoculated on the White Mulberry, which gives them additional hardihood. Price $50 per 100. These trees were planted in an orchard, which it is necessary now to remove.

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Fruits and Ornamental Trees, Green-House Plants, Roses, Bulbous Roots, &c., the collection of which is unrivaled, and priced catalogues of which will be sent to every applicant.

Double Dahlias, above 500 of the most splendid varieties, and comprising 200 very rare and superior kinds not to be found elsewhere in the Union.

Garden, Agricultural and Flower Seeds, an immense collection, comprising all the new and rare varieties of vegetables, &c., as will be seen by the Catalogue.

20 bushels of the celebrated Chevalier Barley.
1000 lbs. Early Crimson Clover, or Trifolium incarnatum.
2000 lbs. White Dutch Clover.
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10 " Venetian do.
100 " Early Angus or Hopetown Oats, the latter weighing 44 lbs. per bushel.
160 bushels Orchard Grass.
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30 " Italian Rye Grass, (*very valuable.*)
100 " Pacey's Perennial Rye Grass.
2000 lbs. Finest Provence Lucerne.
20 bushels New White Field Beans, *very productive.*
300 " Early Nonpariel, Lancashire Pink Eye, Taylor's Forty Fold, and other celebrated Potatoes.
25 bushels Potatoe Onions.

Also—Field Burnet, St. Foin or Esparcette, Large Riga Flax, Lentiles, Vetches Millet, Yellow Clover, a superior large variety of Teazel, two new varieties of Caster Oil Bean, Weld, Woad, Madder, &c.

Orders sent direct per mail will receive immediate attention, and Seeds in quantity will be supplied at very moderate rates. WM. PRINCE & SONS,
Linnæan Botanical Garden and Nurseries,
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THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

☞ Orders for Mr. Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.